

### **Remarks / Arguments**

The non-final Office Action of August 31, 2006 has been carefully reviewed and these remarks are responsive thereto. Claims 20, 29, 33, 37, 38, and 42 have been amended, no claims have been cancelled, and no new claims have been added. Claims 20-24 and 26-44 remain pending in this application. Reconsideration and allowance of the instant application are respectfully requested.

#### ***Claim Objections***

Claims 29, 33, 37, 38, 39, and 42 are objected to based on informalities of the claim language. Applicant thanks the Examiner for pointing out these errors and has amended claims 29, 33, 37, 38, and 42 as suggested by the Examiner.

#### ***Rejections Under 35 U.S.C. § 103***

Claims 20, 26, 28-29, 34, 36-38, and 43 stand rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent No. 6,240,084 to Oran et al. (*Oran*) in view of U.S. Patent No. 6,141,355 to Palmer (*Palmer*). Claims 21-24, 27, 30-33, 35, 39-42, and 44 stand rejected under 35 U.S.C. §103(a), as being unpatentable over *Oran* in view of *Palmer*, and further in view of U.S. Patent No. 6,611,519 to Howe (*Howe*). Applicant respectfully traverses.

Amended claim 20 recites, "scheduling the transmission of the network packets in such a way as to avoid contention for the LAN switch that would otherwise occur if the network packets had been processed by separate devices coupled to the LAN switch." The Office Action acknowledges on page 6 that *Oran* does not disclose this feature. However, on page 7, the Office Action alleges that *Palmer* discloses scheduling the transmission of network packets in such a way as to avoid contention in the LAN switch at col. 9, lines 33-40. Specifically, the Office Action argues, "[C]learly, the X-Hub is an Ethernet switch and prevents collisions (contention) that would have occurred in a conventional Ethernet hub." Applicant disagrees with this characterization of *Palmer*.

As noted by the Applicant in the Amendment filed July 25, 2006, avoiding contention for a LAN switch is not the same as avoiding collisions on the packet network itself (e.g., on the

LAN or WAN). See Specification, paragraphs [0004]-[0005]. Contention for a LAN switch or other network device precedes the occurrence of collisions on the network, and may (but does not necessarily) lead to collisions. In other words, even if *Palmer's* X-Hub prevents collisions on the packet network itself, it would not necessarily succeed in avoiding contention for a LAN switch shared by multiple data sources. Thus, although *Palmer* alleges that it can eliminate packet collisions, it does not purport to "avoid contention" as recited in claim 20. In fact, *Palmer* does not even use the term "contention," or discuss the problem of contention for a LAN switch anywhere in its disclosure.

Additionally, *Palmer* would not likely succeed in reducing contention for a LAN switch (i.e., the X-Hub 4). As stated in *Palmer's* Abstract, "Each device adapter can also broadcast unscheduled transmissions, using [sic] a conventional network protocol (such as CSMA/CD), when it is not in the cross-connect mode." *Palmer's* reference to the CSMA/CD network access method further demonstrates that *Palmer* is concerned with collision avoidance rather than contention avoidance. Additionally, as the Abstract indicates, whenever *Palmer's* X-Hub is not in cross-connect mode, multiple data adapters could send data packets to the X-Hub simultaneously, thus creating the possibility of contention for the X-Hub. Further, since the X-Hub must operate in a non-cross-connect mode as an essential part of *Palmer's* technique for transmitting both real-time data and non-real-time data, *Palmer* thus fails to "avoid contention for the LAN switch that would otherwise occur if the network packets had been processed by separate devices coupled to the LAN switch," as recited in claim 20. Accordingly, Applicant respectfully submits that amended claim 20 is not obvious over the combination of *Oran* and *Palmer*. *Howe* also fails to cure these deficiencies of *Oran* and *Palmer*. Therefore, claims 21-24 and 26-28, which depend from claim 20, are allowable for at least the same reasons, as well as based on the additional features recited therein.

Amended claim 29 similarly recites a device configured to perform, "scheduling the network packets over the LAN switch in such a way as to avoid contention for the LAN switch that would otherwise occur if the network packets had been processed by separate devices coupled to the LAN switch." Thus, for at least similar reasons discussed above with respect to claim 20, amended claim 29 is allowable over a combination of *Oran* and *Palmer*. Since *Howe*

also fails to cure the deficiencies of *Oran* and *Palmer*, dependent claims 30-35 are allowable for at least these same reasons, as well as based on the additional features recited therein.

Amended claim 37 recites, "[a] system for reducing contention for a Local Area Network (LAN) switch, the system comprising a plurality of devices," similar to the device of claim 29. Thus, for at least similar reasons discussed above with respect to claims 20 and 29, claim 37 is allowable over a combination of *Oran* and *Palmer*. Since *Howe* also fails to cure the deficiencies of *Oran* and *Palmer*, dependent claims 38-44 are allowable for at least these same reasons, as well as based on the additional features recited therein.

### CONCLUSION

All rejections having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,  
**BANNER & WITCOFF, LTD.**

Date: Feb. 28, 2007

By: 

Bradley C. Wright  
Registration No. 38,061

Banner & Witcoff, Ltd.  
1100 13th Street, N.W.  
Suite 1200  
Washington, DC 20005-4051  
(202) 824-3000  
(202) 824-3001 (facsimile)